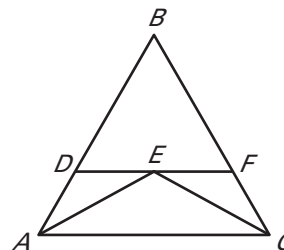


**LESSON**  
**4.7****Practice A**

For use with pages 264–270

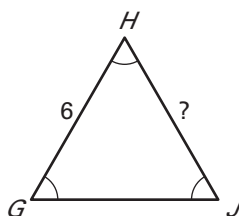
**In Exercises 1–4, use the diagram. Copy and complete the statement. Tell what theorem or corollary you used.**

1. If  $\overline{AE} \cong \overline{CE}$ , then  $\angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}}$ .
2. If  $\angle DAE \cong \angle DEA$ , then  $\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$ .
3. If  $\angle BDF \cong \angle DBF \cong \angle BFD$ , then  $\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$ .
4. If  $\overline{AB} \cong \overline{BC} \cong \overline{AC}$ , then  $\angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}}$ .

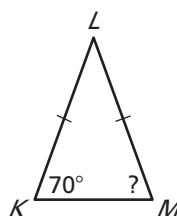


**Find the unknown measure.**

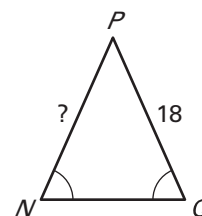
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6.

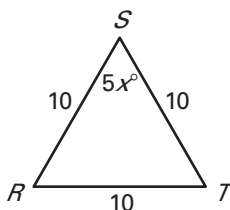


7.

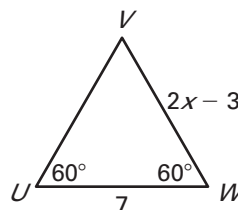


**Find the value of  $x$ .**

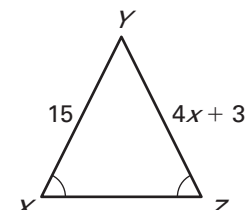
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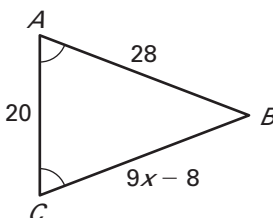
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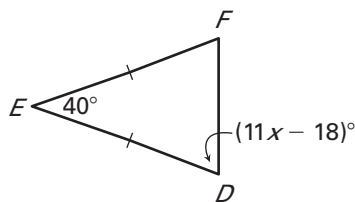
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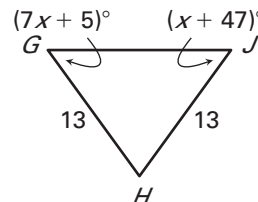
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12.

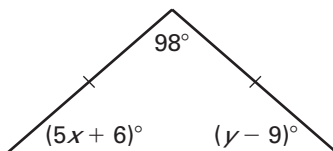


13.

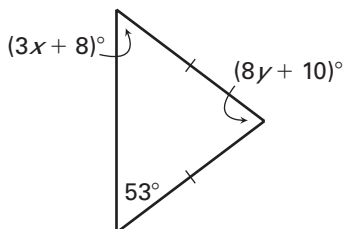


**Find the values of  $x$  and  $y$ .**

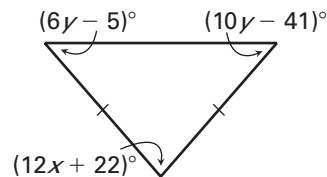
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15.

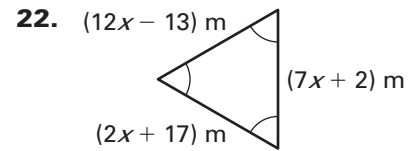
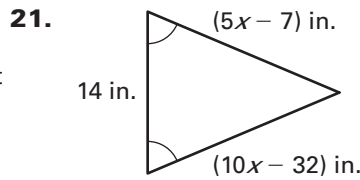
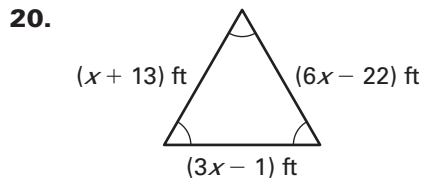
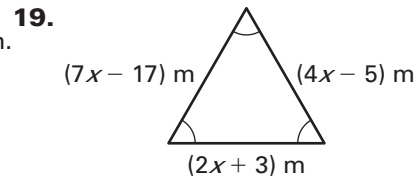
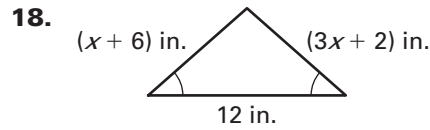
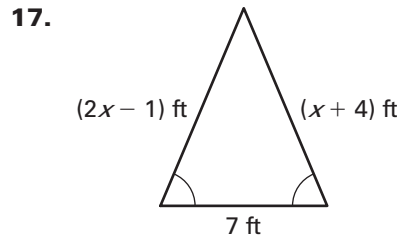


16.

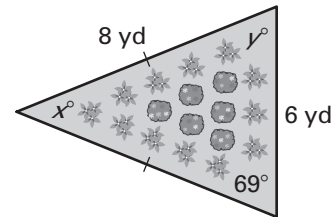


**LESSON 4.7** **Practice A** *continued*  
For use with pages 264–270

**Find the perimeter of the triangle.**



- 23. Garden** You plant a garden in the shape of a triangle as shown in the figure. What is the perimeter of the garden? Find the values of  $x$  and  $y$ .



**Complete the proof.**

- 24. GIVEN:**  $\overline{BD}$  bisects  $\angle ADC$ .  
 $\overline{DB} \perp \overline{AC}$

**PROVE:**  $\triangle ADC$  is isosceles.

Statements	Reasons
1. $\overline{BD}$ bisects $\angle ADC$ .	1. ?
2. ?	2. Definition of Angle Bisector
3. ?	3. Given
4. $\angle 3 \cong \angle 4$	4. ?
5. $\overline{DB} \cong \overline{DB}$	5. ?
6. ?	6. ASA Congruence Postulate
7. ?	7. Corresponding parts of $\cong$ triangles are $\cong$ .
8. $\triangle ADC$ is isosceles.	8. ?

